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EXAMINER
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LETT, THOMAS J

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/943,917	<b>Applicant(s)</b> ABEL ET AL.	
	<b>Examiner</b> THOMAS J. LETT	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 21-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 21-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION*****Response to Arguments***

1. Applicant's arguments filed 03 January 2008 have been fully considered but they are not persuasive.
2. Applicants argue that the Farrell '493 reference does not disclose all the limitations of Applicants' independent claim 29 in that the limitations of "providing printer parameters indicative of resources of a predetermined print including an available amount of consumables" and "making a determination at the second computer whether sufficient consumables exist to print the print job" is absent from the reference.
3. Examiner responds that estimator 10 uses a database 24 as well as the consumable amount available in the set-up of the production equipment (i.e., printers), see col. 5, lines 42-45. When the production equipment is setup, the amount of consumables will be stocked to complete the production quantity. The estimator 10 inherently takes this into account when determining that the production run may produce a consumable shortage. This reads on "providing printer parameters indicative of resources of a predetermined print including an available amount of consumables". The rejection is maintained.

Examiner also responds that the print system of Farrell '493 predicts a consumable shortage. Examiner understands this to mean that there will not be enough resources to print the print job. There is no reason to report a consumable shortage unless the system knows the amount of resources available when the production equipment is set up. If the actual amount used exceeds the inventory needed to complete the production run, then the printer is "short" of the consumable(s) necessary to complete a print job, col. 6, lines 13-15. Since estimator 10 is located at each printer

Art Unit: 2625

and computer, the claim limitation "making a determination at the second computer whether sufficient consumables exist to print the print job" is satisfied by Farrell '493.

4. Applicants argue that the Farrell '493 reference does not disclose all the limitations of Applicants' dependent claims 36-37 in that the limitation of an "alternative printer" is absent from the references.

5. Examiner responds that Applicants should review figure 1 of Farrell '493. There are plural printing systems 2 shown in the print estimation system 1 of figure 1. It is obvious that if there is a shortage on one printing system 2, the user would be skilled enough to consider using another printing system 2 to execute the user's print job. If Applicants have used a printer on a network, with more than one printer on the network, and there was a printer problem (e.g., a printer jam or any other downtime reason), the user or the user's boss would obviously suggest using a different (alternate) printer to get the print job finished. It is not understood why Applicants see a plurality of printers and not consider at least one of the printers as an alternate printer. The user can obviously use estimator 10, which is also present at terminal 12, to identify another printer that can produce the print job without a shortage. It is obvious that terminal 12 can identify a different printer on the network to execute a print job. There is nothing in Farrell '493 that would lead Examiner to believe that a user cannot use a different printer on the network of figure 1.

6. Applicants argue that as to a rejection under §103(a), the U.S. Patent and Trademark Office (":USPTO") has the burden under §103 to establish a *prima facie* case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. Applicants make the revelation that it is the user, not the estimator 10 nor any other element of the second computer that identifies the alternative printer.

Art Unit: 2625

7. Examiner responds that the applied references were all available to those skilled in the printing art prior to Applicants filing date. As already stated by Examiner "*Motamed 6,356,359 makes reference to the primary Farrell ' 129 reference at column 1, lines 40-54. Therefore. Motamed, in the same field of endeavor, had access to the teachings of Farell in order to improve upon and modify Farrell's printing/cost estimation prior art disclosure to reflect using more than one printer. The motivation for doing so would be to improve the capability of estimation for a plurality of machines*" (Office Action, p.8). This is not vague. Those skilled in the art often find ways to improve upon other novel concepts. Motamed mentions a novelty that a certain Farrell prior art fails to accomplish. The prior arts are both estimation systems used to calculate consumables for printed matter.

8. Applicants argue that the cited references, alone or in combination, do not teach or suggest all the limitations of Applicants' independent claim 10 in that the limitations of communicating a type of ink cartridge and ink reservoir system to a host computer as part of a print job submission", and "determining the number of print swaths and pages the ink cartridge can complete based on ink available in the ink reservoir system".

9. Examiner responds that it is obvious that a user can check information before, during, after or at any time. This information can be received at the host while a user is submitting a print job. There is nothing that precludes this information exchange from happening at any time. Further, it is obvious that the system must compute how much ink is "laid down" (swaths) on the printing paths to calculate the ink that will be actually used. In addition database 24 contains historical information of prior print jobs to determine how many pages are associated with ink amounts and this is used by estimator 10 for prediction purposes. The consumable amount available in the set-up of the production equipment (i.e., printers), see col. 5, lines 42-45 is taken into account. When the production equipment is setup, the amount of consumables will be stocked to

Art Unit: 2625

complete the production quantity. The estimator 10 inherently takes this into account when determining that the production run may produce a consumable shortage.

10. Applicants argue that there is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness in that estimating the consumable quantities required to print a particular print job, as taught by the Farrell '493 reference, is unrelated to the monitoring function provided by the i-manage software of the HiKIS reference.

11. Examiner responds that monitoring is useful in estimating the consumable quantities required to print a particular print job since consumable levels are dynamic when using production (e.g., printers) equipment. Since these consumable levels are always changing due to use, it would be very useful for calculation purposes to update the information to be more reliable.

12. Applicants argue that there is no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness in that the Farrell '129 reference is not from the problem solving area of drivers, or alternatively the Farrell '129 does not require the teachings of the Lin reference in order to access a suitable driver.

13. Examiner responds that the prior art of Lin et al is a part of the art of printing. It is also well-known to those skilled in the art of printing. Motamed finds it useful to find suitable controller to print a print job on one of printers shown in figure 10. As such the combination of Lin et al would help Motamed find a suitable driver (controller) to execute the print job.

14. The motivations for claims 31 and 32 are articulated in the claims below.

Art Unit: 2625

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 29-30, 34-37 and 40, 41 and 43-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Farrell et al (USPN 6,266,493 B1).

With respect to claim 29, Farrell et al disclose a method for estimating consumables requirements for a print job, comprising:

providing printer parameters indicative of resources of a predetermined printer (the consumable amount available in the set-up of the production equipment (i.e., printers), see col. 5, lines 42-45. When the production equipment is setup, the amount of consumables will be stocked to complete the production quantity. The estimator 10 inherently takes this into account when determining that the production run may produce a consumable shortage.) including an available amount of consumables (database 24 provides records 50 that contain data useful to estimate the amount of consumables required, col. 4, lines 5-17);

originating the print job at a first computer at a first network node (print job may be initiated from any of user interface 12 or printing systems 2, col. 2, lines 26-32. Examiner notes that each element in the figure 1 system is a network node.);

communicating the print job to a second computer at a second network node (Examiner notes the printers 2 in the system 1 of Farrell et al send data to the Estimator 10. Farrell discloses that Estimator 10 may be located at printing systems 2 as well as

Art Unit: 2625

user interface 12, col. 2, lines 37-39. All of these locations are different nodes. Thus the Estimator 10 can send the data to a second node.);

at the second computer (printing system 2, containing Estimator 10, col. 2, lines 37-39), analyzing the print job to determine print job parameters that affect a required amount of the consumables (col. 4, lines 49-61);

based on the print job parameters, estimating at the second computer the required amount of the consumables required to print the print job (col. 4, lines 49-52);

based on the printer parameters and the required amount of the consumables, making a determination at the second computer whether sufficient consumables exist to print the print job (col. 4, lines 49-52); and

communicating the determination from the second computer to the first computer (operator is notified, col. 6, lines 11-16).

With respect to claim 30, Farrell et al disclose a method of claim 29, wherein the printer parameters are indicative of an ink type, and an ink cartridge or ink reservoir type installed in the predetermined printer (step 55, col. 5, lines 55-56 and col. 6, lines 30-34).

With respect to claim 34, Farrell et al disclose a method of claim 29, wherein the print job parameters are indicative of an ink type, a print media type, a number of pages to be printed, and a print quality (col. 4, lines 30-34).

With respect to claim 35, Farrell et al disclose a method of claim 29, comprising:  
sending the print job from the first computer to the predetermined printer  
(Examiner notes the printers 2 in the system 1 of Farrell et al send data to the Estimator 10. Farrell discloses that Estimator 10 may be located at printing systems 2 as well as user interface 12, col. 2, lines 37-39. All of these locations are different nodes. Thus, Estimator 10 can send the data to a second node.).

With respect to claim 36, Farrell et al disclose a method of claim 29, comprising:



Art Unit: 2625

identifying at the second computer at least one alternative printer having sufficient consumables to print the print job, and communicating the identity of the at least one alternative printer to the first computer (Examiner notes the printers 2 in the system 1 of Farrell et al send data to the Estimator 10. Farrell discloses that Estimator 10 may be located at printing systems 2 as well as user interface 12, col. 2, lines 37-39. All of these locations are different nodes. Thus, Estimator 10 can send data to an alternative node.).

With respect to claim 37, Farrell et al disclose a method of claim 36, comprising:  
at the first computer, selecting one of the alternative printers and sending the print job from the first computer to the alternative printer (Examiner notes the printers 2 in the system 1 of Farrell et al send data to the Estimator 10. Farrell discloses that Estimator 10 may be located at printing systems 2 as well as user interface 12, col. 2, lines 37-39. All of these locations are different nodes. Thus, Estimator 10 can send the data to a second node.).

With respect to claim 40, Farrell et al disclose a method of claim 29, wherein the determination is made by the second computer (if the actual amount used exceeds the inventory needed to complete the production run, then the printer is "short" of the consumable(s) necessary to complete a print job, col. 6, lines 13-15. Since estimator 10 is located at each printer and computer, the claim limitation "making a determination at the second computer whether sufficient consumables exist to print the print job" is satisfied by Farrell '493).

With respect to claim 41, Farrell et al disclose a method of claim 29, wherein the predetermined printer is located at the first network node (Examiner notes that each element in the figure 1 system is a network node.).

Art Unit: 2625

With respect to claim 43, Farrell et al disclose a method of claim 29, wherein the estimating and the making the determination are performed for each of a plurality of printers (estimator 10 can make the determination for each of the printing systems 2 shown in figure 1).

With respect to claim 44, Farrell et al disclose a method of claim 29, wherein the determination is communicated from the second computer to the first computer before the print job is printed (the prediction can be retrieved from any node since the information of estimator 10 can be accessed/received at any peripheral device of figure 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1, 2, 6-9, 21, 22, 26-28 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al (USPN 5,383,129) in view of Motamed (USPN 6,356,359 B1).

With respect to claim 1, Farrell discloses a method for estimating image consumables usage of a print job, comprising:

connecting a computer peripheral device (printer section 8, col. 6, lines 49-53) to a host computer (user interface 52, col. 6, lines 21-28) having predefined information relating to the peripheral device (system operation information, col. 6, line 26); and

offering to a user pricing and estimation of image consumables for completing the print job using ones of a plurality of different printers including the computer

Art Unit: 2625

peripheral device having sufficient image consumables to print the print job, before the print job is printed (cost of consumable materials for printing or rendering is input to the system to be used for estimation purposes, col. 8, lines 14-17).

Farrell does not expressly disclose using a plurality of different printers including the computer peripheral device.

Motamed teach of the sending of a job 84 to a plurality of printers and estimation of consumable usage prior to printing, see at least col. 5, lines 29-31.

Farrell and Motamed are analogous art because they are from the similar problem solving area of estimating printing material and cost. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the network estimation feature of Motamed to the standalone print system 2 of Farrell in order to obtain an estimation system of networked print systems for estimating printing material and cost as an improvement of the Farrell invention, see col. 1, lines 40-50. The motivation for doing so would be to improve the capability of estimation for a plurality of machines.

With respect to claim 2, Farrell discloses a method of claim 1, wherein the host computer (user interface 52, col. 6, lines 21-28) is linked to a generic printer driver located on the host computer (image generator processors 86, col. 6, lines 49-51).

With respect to claim 6, discloses a method of claim 1, further comprising determining printing parameters for choosing a print option that best fits budgetary and printing requirements of the print job (the method of Farrell estimates billing based on good materials usable to the customer and can exclude materials that are deemed useless to a customer for more efficient pricing, col. 8, lines 20-32).

With respect to claim 7, Farrell discloses a method of claim 6, wherein the printing parameters includes at least one of print quantity, print quality, print type and

Art Unit: 2625

paper type (the method of Farrell estimates billing based on good materials usable to the customer and can exclude materials that are deemed “bad quality” to a customer for more efficient pricing, col. 8, lines 20-32).

With respect to claim 8, Farrell discloses a method of claim 6, wherein the printing parameters are ascertained by a remote printer driver (control section 7, col. 6, lines 1-4) and forwarded to a server (the unit cost of print jobs will be obtained from a database, col. 8, lines 52-56).

With respect to claim 9, Farrell discloses a method of claim 8, wherein the printing parameters are incorporated by the server (the unit cost of print jobs will be obtained from a database, col. 8, lines 52-56) in data files (lookup table, col. 8, lines 37-45) to be used by various combinations of instrumented drivers and printers located on the server and shared by other printers connected to the server (image generator processors 86, col. 6, lines 49-51).

Claim 21 a means claim is rejected for the same reason as claim 1.

Claim 22 a means claim is rejected for the same reason as claim 2.

Claim 26 a means claim is rejected for the same reason as claim 6.

With respect to claim 27, Farrell does not disclose selecting one of the plurality of different printers and sending the print job to the selected printer.

Motamed teach of the sending of a job 84 to a one or more of a plurality of printers and estimation of consumable usage prior to printing, see at least col. 5, lines 29-31.

Farrell and Motamed are analogous art because they are from the similar problem solving area of estimating printing material and cost. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the network estimation feature of Motamed to the standalone print system 2 of Farrell in

Art Unit: 2625

order to obtain an estimation system of networked print systems for estimating printing material and cost as an improvement of the Farrell invention, see col. 1, lines 40-50.

The motivation for doing so would be to improve the capability of estimation for a plurality of machines.

With respect to claim 28, Farrell et al ('129) do not disclose the method of claim 1, wherein the peripheral device and at least some others of the plurality of different printers are located at different network nodes.

Motamed teach of the sending of a job 84 to a one or more of a plurality of printers and estimation of consumable usage prior to printing, see at least col. 5, lines 29-31. As shown in figure 11, the printers are located at different nodes.

Farrell and Motamed are analogous art because they are from the similar problem solving area of estimating printing material and cost. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the network estimation feature using a plurality of printers of Motamed to the standalone print system 2 of Farrell in order to obtain an estimation system of networked print systems for estimating printing material and cost as an improvement of the Farrell invention, see col. 1, lines 40-50. The motivation for doing so would be to improve the capability of estimation for a plurality of machines.

With respect to claim 39, Farrell et al ('129) does not expressly disclose that for each of the plurality of different printers including the computer peripheral device, determining from the estimation of the required image consumables, and from printer parameters indicative of an available amount of the image consumables, whether sufficient image consumables exist to complete the print job.

Motamed teach of the sending of a job 84 to a plurality of printers and estimation of consumable usage prior to printing, see at least col. 5, lines 29-31.

Art Unit: 2625

Farrell and Motamed are analogous art because they are from the similar problem solving area of estimating printing material and cost. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the network estimation feature of Motamed to the standalone print system 2 of Farrell in order to obtain an estimation system of networked print systems for estimating printing material and cost as an improvement of the Farrell invention, see col. 1, lines 40-50. The motivation for doing so would be to improve the capability of estimation for a plurality of machines.

17. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitachi Koki Imaging Solutions, Inc. (HiKIS) (Office World News; Oct. 2000; vol. 28, issue 10; pgs 30-31) in view of Farrell et al (USPN 6,266,493 B1).

With respect to claim 10, HiKIS et al disclose a method for analyzing ink usage for a printer, comprising:

communicating a type of ink cartridge and ink reservoir system to a host computer as part of a print job submission (i-manage allows customers/users of a printing machine to check a printer's equipment including consumables such as an ink cartridge, para. 4);

HiKIS does not disclose estimating the ink to be used in a print job based on predefined printing requirements; and

determining the number of print swaths and pages the ink cartridge can complete based on ink available in the ink reservoir system.

Farrell et al ('493) teaches that the system can make a prediction/estimate of resources (*ink and pages are resources*) required to carry out a print request, col. 4, lines 7-13.

Art Unit: 2625

HiKIS and Farrell et al ('493) are analogous art because they are from the similar problem solving area of estimating printing material and cost. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the estimation feature of Farrell et al ('493) to the i-printer of HiKIS in order to obtain an estimation print system for estimating printing material and cost. The motivation for doing so would be to estimate quantities prior to executing print jobs.

With respect to claim 11, HiKIS discloses a method of claim 10, further comprising relaying the determined information to a user (the system can monitor usage of the print system and send out preventative maintenance regarding replacement of consumables such as toner cartridges indicating that the system can estimate ink usage, para. 6).

With respect to claim 12, HiKIS discloses a method of claim 11, further comprising providing the user with a plurality of options, including allowing the print job to proceed, choosing an alternative printing system (users can send print jobs to multiple printers, para. 8), and ordering ink consumables for the printer (para. 4).

With respect to claim 13, HiKIS discloses a method of claim 12, further comprising offering the user upgrade options, including ordering a generic stand alone printer driver and a server printer driver (users can connect to suppliers and web sites for supplies, sales, and customer support via an embedded web browser, para. 4).

With respect to claim 14, HiKIS discloses a method of claim 11, further comprising providing the user with a hyperlink via the Internet to a supplier of the printer for automatic ordering of the ink consumables (users can connect to suppliers and web sites for supplies, sales, and customer support via an embedded web browser, para. 4).

Art Unit: 2625

18. Claims 3-5 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell (USPN 5,383,129) in view of Motamed (USPN 6,356,359 B1) as applied to claim 1 and further in view of Lin et al (USPN 6,757,070 B1).

With respect to claim 3, Farrell in view of Motamed does not disclose that the host computer is linked to a remote printer driver in a server system. Lin et al teach of a universal print driver, col. 4, lines 54-66 linked to a host computer (client computer 20, col. 4, line 56) in a server system (client/server printing system 12, col. 3, lines 31-34).

Farrell in view of Motamed and Lin et al are analogous art because they are from the similar problem solving area of connecting remote drivers. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the universal print driver feature of Lin et al to the system of Farrell in view of Motamed in order to obtain a print driver useable by a client. The motivation for doing so would be to access a print driver.

With respect to claim 4, Farrell in view of Motamed does not disclose that the server supplies information pertaining to a number of instrumented drivers and printers to the host computer. Lin et al teach of a server sending data items 114 such as a printer driver to the web browser window 18 of client computer 20, col. 5, lines 1-9.

Farrell in view of Motamed and Lin et al are analogous art because they are from the similar problem solving area of obtaining driver information. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the universal print driver feature of Lin et al to the system of Farrell/Motamed in order to obtain print driver information useable by a client. The motivation for doing so would be to access a suitable print driver.

With respect to claim 5, Farrell in view of Motamed does not disclose that the remote server is linked to the host computer via at least one of the Internet or a local



Art Unit: 2625

intranet. Lin et al teach of a server sending data items 114 such as a printer driver to the web browser window 18 of client computer 20, col. 5, lines 1-9.

Farrell in view of Motamed and Lin et al are analogous art because they are from the similar problem solving area of obtaining driver information. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the universal print driver feature of Lin et al to the system of Farrell in view of Motamed in order to obtain print driver information useable by a client. The motivation for doing so would be to access a suitable print driver.

Claim 23 a means claim is rejected for the same reason as claim 3.

Claim 24 a means claim is rejected for the same reason as claim 4.

Claim 25 a means claim is rejected for the same reason as claim 5.

19. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al (USPN 6,266,493 B1) in view of (HiKIS) (Office World News; Oct. 2000; vol. 28, issue 10; pgs 30-31).

With respect to claim 33, Farrell et al does not disclose a method of claim 29, wherein the printer parameters include an identification number indicative of a particular consumable item, the identification number queryable to determine if the particular consumable item is replaced.

HiKIS teaches that users can connect to suppliers and web sites for supplies, sales, and customer support via an embedded web browser, para. 4. Suppliers would support any consumable that needs to be replaced or any product that has to be repaired.

Farrell et al ('493) and HiKIS are analogous art because they are from the similar problem solving area of monitoring print consumables. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the i-printer of

Art Unit: 2625

HiKIS to the estimation feature of Farrell et al ('493) in order to obtain an print system for monitoring printing material. The motivation for doing so would be to maintain adequate consumable levels for printing.

20. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al (USPN 6,266,493 B1) in view of Weichmann et al (USPN 6,580,524 B1).

With respect to claim 31, Farrell et al does not disclose a method of claim 30, wherein the printer parameters are further indicative of a printhead temperature of the predetermined printer.

Weichmann et al teach of using statistical methods to compensate for the temperature parameter that affects a print job because of a resultant change in viscosity by the time a print job is to be printed, col. 5, line 61 – col. 6, line 9.

Farrell et al and Weichmann et al are analogous art because they are from the similar problem solving area of printer management. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the temperature compensation feature of Weichmann et al to the production equipment of Farrell et al in order to obtain a printer device which can compensate for printhead temperature. The motivation for doing so would be to adjust for temperature increases on a production machine that produces multiple print jobs and to adjust for temperature increases that affect the usage of ink in a consumable prediction system.

With respect to claim 32, Farrell et al does not disclose a method of claim 31, wherein the printhead temperature affects ink usage, the estimating including adjusting the required amount of the consumables based on the printhead temperature.

Art Unit: 2625

Weichmann et al teach of using statistical methods to compensate for the temperature parameter that affects a print job because of a resultant change in viscosity by the time a print job is to be printed, col. 5, line 61 – col. 6, line 9.

Farrell et al and Weichmann et al are analogous art because they are from the similar problem solving area of printer management. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the temperature compensation feature of Weichmann et al to Farrell et al in order to obtain a printer device which can compensate for printhead temperature. The motivation for doing so would be to adjust for temperature increases that affect the usage of ink in a consumable prediction system.

21. Claims 38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al (USPN 6,266,493 B1) in view of Motamed (USPN 6,356,359 B1).

With respect to claim 38, Farrell et al ('493) does not disclose based on the print job parameters, estimating a cost of the consumables required to print the print job, and communicating the cost to the first computer.

Motamed teach of the sending of a job 84 to a one or more of a plurality of printers and estimation of consumable usage prior to printing, see at least col. 5, lines 29-31 so that the department server 96a (reads on first computer) can track costs.

Farrell and Motamed are analogous art because they are from the similar problem solving area of estimating printing material and cost. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the department accounting 100 feature of Motamed to the standalone print system 2 of Farrell in order to obtain an estimation system of networked print systems for estimating printing material. The motivation for doing so would be to improve the capability of estimation for a plurality of machines.

Art Unit: 2625

With respect to claim 42, Farrell et al does not disclose a method of claim 29, wherein making the determination includes determining a cost of printing the print job based on the required amount of the consumables (cost of consumable materials for printing or rendering is input to the system to be used for estimation purposes, col. 8, lines 14-17).

Motamed teach of the sending of a job 84 to a one or more of a plurality of printers and estimation of consumable usage prior to printing, see at least col. 5, lines 29-31 so that the department server 96a (reads on first computer) can track costs.

Farrell and Motamed are analogous art because they are from the similar problem solving area of estimating printing material and cost. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the department accounting 100 feature of Motamed to the standalone print system 2 of Farrell in order to obtain an estimation system of networked print systems for estimating printing material. The motivation for doing so would be to improve the capability of estimation for a plurality of machines.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 2625

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS J. LETT whose telephone number is (571)272-7464. The examiner can normally be reached on 8-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas J. Lett/  
Examiner, Art Unit 2625

/David K Moore/  
Supervisory Patent Examiner, Art Unit 2625